even after many years of denervation. This increased emphasis on atraumatic technique has led most hand surgeons to carry out even routine neurorrhaphy with magnification.

Providing skin and soft tissue coverage for the mutilating type of hand injury has also benefited from the advances in microsurgery. A free flap can be taken from the groin and transferred in one stage to the hand with microvascular anastomosis of the arteries and veins. The traditional multistaged flap coverage of soft tissue defects has also been refined so that larger areas can be resurfaced with thin supple flap tissue.

The final area that should be mentioned is the continuing development in prosthetic finger joint replacement. At present, prosthetic devices are available for proximal interphalangeal joints, metacarpalphalangeal and lunate, scaphoid and trapezium. These devices are durable, reasonably complication free, and can allow a previously painful, nearly useless hand to function without pain.

JOHN J. SILSBY, MD

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Resection Surgical Operation of the Head and Neck Region

RENEWED INTEREST in combined drug therapy has encouraged surgeons to undertake major resection of squamous cell cancer of the head and neck region for palliation as well as for potential curative resections in extensive lesions. Although the basic concepts of managing cancer of the head and neck region have not changed in the last decade, there is now a trend to have such management geared more to the individual patient in the regional dissection of lymph glands and the more aggressive use of irradiation in conjunction with surgical operation. Improved concepts and techniques in reconstructive surgical procedures have permitted extensive operative procedures for resection and reconstruction with minimum loss of function. Although the numbers of patients presenting with primary cancer of the head and neck region are diminishing, it is a continuing problem and the functional disability that tumors of the head and neck region present remain a critical aspect of this disease. The low five-year survival from tumors of the head and neck region was in some ways a function of the reluctance on the part of the treating surgeon to adequately resect lesions about the face. Improved techniques now allow more extensive resections and it appears that the five-year survival rate is gradually improving. This improvement is not dramatic and it is hoped that improved concepts in drug therapy and immune therapy will further enhance the treating physician's ability to control cancer of the head and neck.

HARVEY A. ZAREM, MD

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Laser Management of Cutaneous Vascular Lesions

THE ARGON PHOTOCOAGULATING LASER has been used for five years to treat cutaneous vascular anomalies of the skin such as port-wine stains, capillary and cavernous hemangiomas, telangiectasia and superficial varicosities of the legs. The most satisfactory results have been with port-wine stains, or nevus flammeus, a congenital vascular lesion, red or purple in color, often causing significant facial deformity. Previous treatment methods such as excision and grafting, dermabrasion and tattooing have been relatively unsatisfactory.

Argon laser light is very intense, may be finely focused, and is selectively absorbed by the red pigment in the hemoglobin molecule. When used to treat a port-wine stain, the laser beam passes through the intact skin, sparing secondary skin appendages. As the beam encounters the hemangioma's red pigment, it releases its energy as heat, causing coagulation and vessel thrombosis. The lesion is thereby substantially obliterated, but the overlying skin is relatively unharmed, so that the laser burn may heal with minimal scarring. In our experience with more than 40 patients, this treatment has resulted in two scars, and these are becoming less distinct with maturity. Histopathologic examination of treated tissues shows minimal increase in dermal collagen and decreased numbers of blood vessels, with intact secondary skin appendages. Furthermore, laser light does not appear to produce the ionizing changes seen with x-radiation.

Use of an argon photocoagulating laser shows